



**Protecting Livestock – Improving Human Lives** 

#### **Foreword**

This year has seen major achievements across GALVmed. Whether making progress in developing innovative animal health products, establishing sustainable and profitable markets for those products or supporting joined-up policy initiatives to encourage animal health investment, our dedicated staff have been working hard to make animal health product markets function in order to improve animal health and the wellbeing and economic progression of small-scale livestock producers in South Asia and sub-Saharan Africa.

The achievements briefly highlighted in this review are shared across GALVmed's three main areas of work: product development, commercial development, and enabling environment and partner engagement. Taken as a whole, they demonstrate impact right across the animal health industry. GALVmed's broad expertise means that we are uniquely placed to support the journey of vaccines and other animal health products from their development in the laboratory to their use in the field.

This journey is a long and complex one, requiring many years and sustained product development partnerships to complete. Some of the successes in this review, such as the combination vaccines registered and the LastMile initiative, represent the culmination of years of sustained effort from our staff and partners, as well as the continued support of our donors. Others, such as the partnership to combat African Animal Trypanosomiasis, bear the promise of a new product in a market that has not seen innovation in 50 years.

Small-scale producers and their livelihoods have been and will always be at the heart of GALVmed's work. From the backyard chicken coops of Mumbai to the cattle pastures of central Kenya, millions of people are working incredibly hard to raise animals, produce food, support families and uphold economies. They do this in the face of global financial struggles, limited access to technology and increasingly unpredictable weather.

And yet, despite these challenges, they have proven themselves to be not only livestock experts but astute businesspeople and ambitious entrepreneurs, ready and willing to adopt new technologies and practices. Given the same access to animal health solutions as their counterparts in the Global North, small-scale producers will become the powerhouse of the livestock sector throughout sub-Saharan Africa and South Asia. GALVmed's mission is to provide every small-scale livestock producer in these regions with the solutions they need to thrive.



Dr Carolin Schumacher

Chief Executive of GALVmed

### VITAL projects reach dossier milestone

2023 has been an important year for GALVmed's flagship programme, VITAL (Veterinary Innovations Transforming Animal Health and Livelihoods). VITAL was established in 2017 with funding from the Bill & Melinda Gates Foundation (BMGF) and the UK Government Foreign, Commonwealth & Development Office (FCDO) to create not only effective new livestock vaccines, but the large-scale commercial distribution networks needed to commercialise these and other essential animal health products. After six years of research and development, two VITAL vaccine development projects have now reached the milestone of dossier submission: a combination vaccine for contagious bovine pleuropneumonia, lumpy skin disease and Rift Valley fever, and a Newcastle disease-infectious bursal disease combination vaccine. A third product – a combination vaccine for contagious caprine pleuropneumonia, sheep and goat pox and peste des petits ruminants – is due to reach this stage by early 2024, and a fourth combination vaccine, against goat pox and peste des petits ruminants in India, is scheduled for dossier submission by December 2024. In anticipation of their commercialisation, GALVmed has commissioned an assessment of the vaccines' market potential in South Asia and sub-Saharan Africa and has supported the development of detailed business plans for all projects. GALVmed also provided monitoring and evaluation (M&E) support, with field studies in Senegal, India and Nepal to examine the assumptions underpinning impact modelling estimates for the VITAL products.





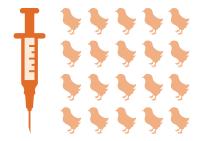
# 2 VITAL vaccine projects reached dossier submission and regulatory review in 2023

## 30 million day-old chicks vaccinated at the hatchery through PREVENT

This year has also seen an impressive expansion of PREVENT (Promoting and Enabling Vaccination Efficiently, Now and Tomorrow). Funded by BMGF and implemented by Ceva Santé Animale and GALVmed, this project is introducing vaccination to medium-sized African hatcheries and encouraging small-scale producers to purchase pre-vaccinated poultry as a way to strengthen their sustainability and commercial enterprises. In 2023, PREVENT onboarded 9 new hatcheries, bringing the total participating hatcheries to 32, and expanded to Ghana, Rwanda and Burkina Faso. A total of 30.3 million day-old chicks were vaccinated in 2023 – more than the project's previous two years combined. Special attention was also paid in 2023 to understanding the gender implications of PREVENT. GALVmed's M&E team worked with the International Livestock Research Institute to carry out a gender landscaping study and with Oxford Policy Management to implement a quasi-experimental impact evaluation in Tanzania and Nigeria. In 2024, the M&E team will focus on understanding the transformational market systems changes catalysed through PREVENT.

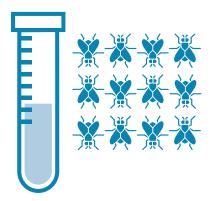
### 30.3 million day-old chicks

were vaccinated in 2023 thanks to PREVENT – more than the project's previous two years combined



### A partnership against African Animal Trypanosomiasis

The search for improved products to combat African Animal Trypanosomiasis (AAT) is one of GALVmed's longest-running projects. This mission received a significant boost in September 2023 when GALVmed announced that it had joined forces with BMGF, FCDO and Boehringer Ingelheim to <u>develop a new medical solution</u> to this highly damaging livestock disease. This partnership will conduct research and collaborate with other projects with the aim of creating and promoting a new solution to AAT before 2030.



Efforts are underway to create and promote a **new** solution to African Animal Trypanosomiasis before 2030



#### Brucellosis Vaccine Prize entrants access more funds

Funded by AgResults (a collaboration between BMGF and the governments of Australia, Canada, the United Kingdom and the United States) and implemented by GALVmed, the <u>Brucellosis Vaccine Prize</u> is a \$30 million competition to develop an efficacious, safe and affordable vaccine against *Brucella melitensis*, the pathogen of brucellosis in goats and sheep. To give entrants the best chance of succeeding, in 2023 GALVmed and AgResults revised the prize's funding structure so that competitors can access more funds to complete the critical but challenging proof-of-principle stage of vaccine development. This has resulted in three new applications for the extra funding. These applications will be assessed and awarded in early 2024.

The Brucellosis Vaccine Prize received **3 new applications for extra funding** in 2023 following a revision to its funding structure







#### No-cost extension boosts LastMile results

The <u>LastMile initiative</u> – a BMGF-funded collaboration with Boehringer Ingelheim Animal Health – has improved the availability of animal medical resources for over 336,000 small-scale producers in remote areas of sub-Saharan Africa. The initiative received a no-cost extension in 2023, allowing five new Boehringer Ingelheim product registrations in eight countries across Africa. Coming on top of the 53 products already registered thanks to LastMile, this has increased the availability of veterinary medicines in participating countries by 86 percent.



#### Distribution network pays dividends in Senegal

GALVmed's commercial support in 2023 has shown once again that it pays to invest in small-scale livestock producers. An example comes from an ongoing project with veterinary laboratory LAPROVET to forge a sustainable smallholder-focused animal health distribution network in Senegal. LAPROVET, working with the distributor GENERAL VET, achieved and surpassed its revenue targets in Senegal for 2023. Motivated by this accomplishment – which marks the fifth consecutive year the project has met or surpassed its annual revenue targets – GENERAL VET invested in the distribution of animal health products to small-scale producers. In 2023 the company increased its storage capacity and fleet of delivery vehicles to store more products in better conditions and to reach a larger number of small-scale producers.

GALVmed's commercial support enabled LAPROVET to achieve and surpass its revenue targets in Senegal for 2023



### Hester Biosciences establishes sustainable commercial networks in South Asia

GALVmed's five-year collaboration with Hester Biosciences South Asia – to develop a commercially viable supply network for priority veterinary medicines, vaccines and other products in Nepal and the Indian states of Bihar and Uttar Pradesh – came to a successful close in March 2023. By that time, Hester had established a sustainable supply network for priority animal health products in 32 districts in Uttar Pradesh, 22 in Bihar and 20 in Nepal. Its business now includes 158 distributors selling products to 979 retailers, who are supported by a team of 8 managers and 36 veterinary sales executives, as well as 505 veterinarians and 1,340 paraprofessionals. Together, they have reached 312,899 small-scale producers in Nepal and India and averted over \$6.2 million in livestock deaths.

Between 2018 and 2023, GALVmed helped Hester Biosciences and its partners reach **312,899 small-scale producers** in Nepal and India and **avert over \$6.2 million** in livestock deaths



#### **Mutual Recognition Procedure expands scope**

2023 has also been a busy year for the East African Community (EAC)'s <u>Mutual Recognition Procedure</u> (MRP) – a trailblazing multinational regulatory system, established with GALVmed's support, to harmonise product registration and allow companies to apply for product licenses in multiple countries simultaneously. Thirty-four applications to the MRP were received from 11 local and international companies, reflecting the growing number and diversity of companies using the MRP. Most of these applications are for vaccines, although 11 are for pharmaceutical products. Further work with the EAC in 2023 included expansion of the MRP to include veterinary pesticides. Twenty-one draft technical documents have been developed and are now being validated, with GALVmed's continued support, in all seven EAC Partner States. Once validated, the guidelines for registration of ectoparasiticides and processes relating to conducting field trials will be standardised across the EAC. Draft guidelines for the registration of medical devices, nutrients and aquatic animal medicines in the EAC have also been developed and are awaiting validation.



The East African Community
Mutual Recognition Procedure
received **34 applications from 11 companies** in 2023

# Major step towards pan-African harmonisation of vaccine registration

In July 2023, the Pan-African Veterinary Vaccine Centre of the African Union, in collaboration with GALVmed and the Nigeria Veterinary Research Institute, organised a <u>groundbreaking workshop</u> in Abuja to harmonise registration standards for veterinary vaccines. The workshop, attended by 60 representatives of national and international organisations and companies, agreed that technical standards developed under the MRP for the registration of veterinary vaccines will now be used for the registration of vaccines for peste des petits ruminants through the national veterinary drug registration authorities and Regional Economic Communities throughout Africa. This is an exciting and important step towards pan-African harmonisation of veterinary product registration.



2023's peste de petits ruminants workshop was attended by **60 representatives** of national and international organisations and companies

# Monitoring and evaluation insights strengthen decision-making

2023 saw the successful implementation of GALVmed's M&E strategy and a comprehensive assessment of our organisational performance, which will lay the foundations for future measurement and investment. The M&E team also strengthened the capabilities of GALVmed and its partner organisations with training workshops and knowledge-sharing initiatives designed to support a culture of evidence-based decision-making.

2023 saw the successful implementation of GALVmed's **new M&E strategy** 



#### **Looking to 2024**

As we conclude our review of 2023, we celebrate our collective achievements and resilience, appreciate the hard work of our team and partners, and look forward to exciting opportunities ahead in 2024. For more information, visit <u>our website</u> (www.galvmed.org) and explore our open-access database, <u>GALVdox</u> (galvdox.galvmed.org).





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With funding from:









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